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COMPLETE SPECIFICATION

1 SHEET

*This drawing is a reproduction of
the Original on a reduced scale*

FIG.1.

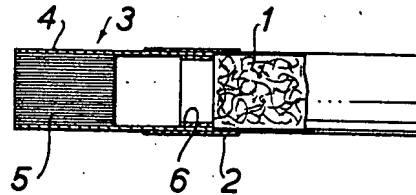


FIG.2.

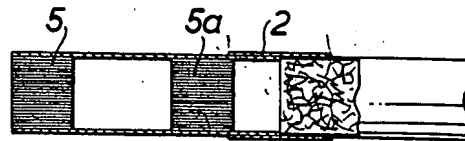
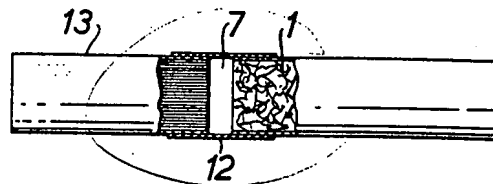


FIG.3.



PATENT SPECIFICATION

(11) 1 214 319

DRAWINGS ATTACHED

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GREAT BRITAIN
 GROUP 3.36....
 CLASS 1/31.....
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(54) IMPROVEMENTS IN OR RELATING TO MOUTHPIECE CIGARETTES AND LIKE SMOKING ARTICLES

(71) We, DESMOND WALTER MOLINS, a British Subject, and MOLINS MACHINE COMPANY LIMITED, a British Company, both of Evelyn Street, Deptford, London, S.E.8., do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention concerns improvements in or relating to mouthpiece cigarettes and like smoking articles.

In mouthpiece cigarettes in general commercial use at present, the mouthpiece portion includes a plug adjacent the tobacco portion and secured to it by an encircling band. Such plugs are commonly referred to as "filters" and may for example be cellulose acetate or paper plugs. Some mouthpiece cigarettes have a single plug, while others have more complex arrangements, such as two end to end plugs of different materials, or two plugs spaced endwise with granular filtering material between them.

In many of these cigarettes the mouthpiece portion is at least equal in length to that part of a plain (i.e. all-tobacco) cigarette which the average smoker would discard unsmoked. It might therefore be expected that smokers would smoke the whole of the tobacco portion of a mouthpiece cigarette, discarding only the mouthpiece portion. In fact, this seldom happens. One probable reason for this is that the plug in contact with the tobacco is made of a material which is combustible or at any rate is affected by contact with burning tobacco so as to produce fumes which taste unpleasant. To make sure of avoiding this, a smoker tends to finish smoking such a cigarette when there is still a considerable quantity of unburned tobacco between the plug and the burning end—usually a good deal more than is actually necessary to ensure that the burning tobacco does not come into contact with the plug.

A similar problem arises when the uniting band which joins the mouthpiece portion to the tobacco portion is made of a material which burns with an unpleasant taste. In many mouthpiece cigarettes the tobacco portion consists of a length of tobacco in a thin paper tube, and the uniting band necessarily overlaps this, usually by about 3 mm. Thus even if the tobacco is not smoked right down to the plug, an unpleasant taste may be given to the smoke if the burning tobacco reaches the edge of the uniting band.

According to the present invention there is provided a mouthpiece cigarette in which the mouthpiece portion includes a filter plug enclosed within a fire-retardant tube and spaced from the tobacco portion, and in which the mouthpiece portion is joined to the tobacco portion by a uniting band made of an incombustible material capable of being in contact with burning tobacco without imparting any unpleasant or undesired taste to the smoke drawn into the smoker's mouth. The end portion of the tube adjacent the tobacco portion may be provided on its inner surface with a ring of fire-retardant material.

Mouthpiece cigarettes in accordance with the invention will now be described by way of example with reference to the accompanying drawing, in which Figures 1, 2 and 3 diagrammatically represent various embodiments.

Referring first to Figure 1, a cigarette portion 1 is joined by an encircling band or sleeve 2 to a mouthpiece portion 3 consisting of a hollow tube 4 which contains a conventional filter plug 5 at its extreme mouthpiece end. The tube 4 may consist of an inherently incombustible material such as fibre-glass, or it may consist of cardboard or stiff paper suitably treated, e.g. covered or impregnated with a suitable fire retardant at that end of the tube which is nearest the tobacco of the cigarette portion 1. For example as diagrammatically illustrated in Figure 1 a patch or ring 6 of suit-

[Price 5s. 0d. (25p)]

able fire-retardant substance can be provided on the internal surface of the tube 4; this could be applied during manufacture of the tube, e.g. in a liquid form, by a daubing or printing process. Such a material could also, with advantage, be applied to the rim of the tube so as to be in direct contact with the tobacco.

A tubular mouthpiece as discussed above has the advantage that it can contain a filter plug within it, thus serving both as a fire retardant and as a holder for the filter.

If desired, the tube can contain more than one filter if desired; for example a fairly long mouthpiece portion could consist of a cardboard tube, containing a filter plug 5 at the extreme mouth end and a further filter plug 5a (see Figure 2) spaced from it but also spaced from the opposite end of the tube, so that the end of the tube adjacent the tobacco portion is hollow and open, the material at that end being suitably treated, e.g. by impregnation or coating with a fire-retardant substance.

The sleeve 2 is of incombustible material such as metallic foil. It is found that an incombustible sleeve extending over the tobacco portion, possibly by conduction of heat away from the mouthpiece portion, reduces the risk of combustion of the mouthpiece portion as the tobacco is smoked down to the end. With a sleeve consisting of an aluminium foil uniting band, it has been found possible to smoke virtually the whole of the tobacco without any apparent effect on the mouthpiece, even when the mouthpiece comprised a cellulose acetate filter plug adjoining the tobacco.

In Figure 3 is diagrammatically shown a construction in which the cigarette portion 1 is spaced from the mouthpiece portion 13, the space 7 between them being bridged by a sleeve 12 which is secured to both portions. The mouthpiece portion shown consists of a conventional filter plug, but it could of course be a tube containing more than one filter plug, e.g. one at each end with a gap between them.

The sleeve 12 joining the mouthpiece portion to the cigarette portion must be strong enough to provide a reasonably rigid connection, and it preferably extends only partly over the mouthpiece portion, as shown in Figure 3.

It is found that if the gap between the tobacco portion and mouthpiece portion is reasonably small, a sufficiently rigid connecting sleeve can consist of aluminium foil.

The combination of the gap and the incombustible sleeve bridging it is sufficient to ensure that all the tobacco can be smoked without adversely affecting the taste.

Where a metallic sleeve, such as aluminium foil, is used, it may be backed by thin paper, secured to it either inside or outside the metallic sleeve.

An advantage of having an incombustible sleeve is that it acts to retain the burning tobacco adjacent the mouthpiece and tends to prevent it from falling away from the cigarette.

It is contemplated that a cigarette in accordance with the invention should have a long mouthpiece portion. For a given length of cigarette, the length of the tobacco portion could be reduced by an amount approximately equal to the length of tobacco which a smoker normally discards in an ordinary cigarette; the mouthpiece portion would then be correspondingly longer. As all or substantially all the tobacco can be smoked, wastage of tobacco is eliminated and the consumer can be given a cigarette which, while containing less tobacco, nevertheless contains as much satisfactorily smokable tobacco as an ordinary cigarette.

WHAT WE CLAIM IS:—

1. A mouthpiece cigarette in which the mouthpiece portion includes a filter plug enclosed within a fire-retardant tube and spaced from the tobacco portion, and in which the mouthpiece portion is joined to the tobacco portion by a uniting band made of an incombustible material capable of being in contact with burning tobacco without imparting any unpleasant or undesired taste to the smoke drawn into the smoker's mouth.

2. A mouthpiece cigarette according to Claim 1, wherein the end portion of the tube adjacent the tobacco portion is open.

3. A mouthpiece cigarette according to Claim 1 or Claim 2, wherein the end portion of the tube adjacent the tobacco portion is provided on its inner surface with a ring of fire-retardant material.

4. A mouthpiece cigarette constructed substantially as described herein with reference to Figure 1 or to Figure 2 or to Figure 3 of the accompanying drawing.

W. A. POWLEY,
Chartered Patent Agent,
2, Evelyn Street,
Deptford, London, S.E.8,
Agent for the Applicants.